

GUILFORD COUNTY
DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
APPLICATION FOR PERMIT TO CONSTRUCT A MONITORING/RECOVERY
WELL SYSTEM

Date: 4/21/97

In accordance with the provisions of the Guilford County Board of Health Rules and Regulations Governing the Construction and Abandonment of Monitoring and Recovery Wells, application is hereby made for a permit to construct monitoring/recovery wells.

1. Site Name: Former Summit Avenue Sunoco Incident #: 10141
2. Address of Well: 1103 Summit Avenue, Greensboro, NC
3. Name of Well Owner: Sun Company, Inc. Telephone: 610-859-5705
4. Owner's Mailing Address: 4041 Market Street, Aston, PA 19014
5. Property Owner (if different from well owner): _____
6. Property Owners' Mailing Address: _____
7. Reason for Monitoring Well(s): Environmental Assessment
(e.g. nondischarge permit, suspected contamination, environmental assessment, etc.)
8. Type of facility for which the well is needed: Underground Storage Tank
(e.g. nondischarge facility, waste disposal site, landfill, underground storage tank, etc.)
9. Contaminant type (if applicable): Organics
(e.g. nutrients, organics, heavy metals, etc.)
10. Are there existing recovery wells associated with the monitoring well(s)? NO
If yes, how many? _____ Number of new/additional recovery well(s) to be installed _____
11. Distance to a known waste or pollution source: Various feet
12. Are any water supply wells located <500 feet from the proposed well? No
If yes, give distance : _____ feet
13. Well Driller: Various
14. Registration #: Various
15. Driller's Address: Various
Telephone: _____

Fee: \$ 200 -

Date Paid: 5-5-97

Receipt#: 15372

(Continued on Reverse)

PROPOSED MONITORING/RECOVERY WELL CONSTRUCTION INFORMATION

1. Total number of wells to be constructed: 10 Number to be completed in bedrock: None
Number to be completed in unconsolidated material: 10
2. Estimated depth of well(s): 30 feet
3. Gravel or sand pack interval (if appropriate): From 15 feet to 30 feet
4. Type of casing used: PVC
(i.e. PVC, stainless steel, galvanized steel, etc.)
5. Diameter of casing: 4 & 2 inches Thickness of casing: _____ inches
6. How will the well(s) be secured? Locking Well Cap
7. Beginning construction date: Existing Wells
8. Completion date: Not applicable

ADDITIONAL INFORMATION

1. ATTACH A SITE MAP SHOWING THE LOCATIONS OF THE FOLLOWING:
 - (a) PROPOSED MONITORING/RECOVERY WELL(S)
 - (b) ALL EXISTING MONITORING/RECOVERY WELLS AND TEST BORINGS WITHIN THE PROPERTY BOUNDARY
 - (c) ALL WATER SUPPLY WELLS WITHIN 500 FEET OF THE WELL
 - (d) AT LEAST TWO REFERENCE POINTS (e.g. numbered roads, intersections, streams, etc.)
2. PROVIDE A WELL CONSTRUCTION DIAGRAM OF EACH WELL SHOWING DIAMETER, ESTIMATED DEPTH, SCREEN INTERVALS, SAND/GRAVEL PACKS, TYPE OF CASING MATERIAL, CASING WALL THICKNESS, WELL HEAD COMPLETION DETAILS, ETC.

The Applicant hereby agrees the proposed well(s) will be constructed in accordance with approved specifications and conditions of the Well Construction Permit as regulated under the Guilford County Board of Health Rules and Regulations Governing the Construction and Abandonment of Monitoring and Recovery Wells and accepts full responsibility for compliance with these rules.

Robert E. Beyer Jr
Signature of Applicant or Agent

Project Geologist
Title

If the property is owned by someone other than the applicant, the property owner hereby consents to allow the applicant to construct monitoring wells as outlined in this application and that it shall be the responsibility of the applicant to ensure that these monitoring/recovery wells conform to the Guilford County Board of Health well construction standards.

Signature of Property Owner (if different from applicant)

Attach agreements.

FOR OFFICE USE ONLY

Quadr. No. _____ Serial No. _____
Lat. _____ Long. _____ Po. _____
Minor Basin _____
Basin Code _____
Header Ent. _____ GW-1 Ent. _____

WELL CONSTRUCTION RECORD

DRILLING CONTRACTOR Law Engineering
DRILLER REGISTRATION NUMBER 332

STATE WELL CONSTRUCTION PERMIT NUMBER: 40-1070-WM-0495

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: Greensboro, NC

County: Gallford

(Road, Community, or Subdivision and Lot No.)

2. OWNER Sunoco/Mid-State Oil Company
ADDRESS 1835 Market St. 11 Penn Ctr. 9th Floor
Philadelphia PA 19103
City or Town State Zip Code

Depth From To
DRILLING LOG
Formation Description

See Soil Test Boring Log
MW-1

3. DATE DRILLED 12/3/92 USE OF WELL Monitoring

4. TOTAL DEPTH 22 ft CUTTINGS COLLECTED ☒ Yes ☐ No

5. DOES WELL REPLACE EXISTING WELL? ☐ Yes ☒ No

6. STATIC WATER LEVEL: _____ FT. ☐ above TOP OF CASING.
TOP OF CASING IS _____ FT. ABOVE LAND SURFACE.
☒ below

7. YIELD (gpm): N.A. METHOD OF TEST N.A.

8. WATER ZONES (depth): _____

9. CHLORINATION: Type N.A. Amount N.A.

10. CASING:

Depth	Diameter	Wall Thickness or Weight/FT.	Material
From <u>0</u> To <u>5</u> Ft.	<u>4-in</u>	<u>Sch 40</u>	<u>PVC</u>
From _____ To _____ Ft.	_____	_____	_____
From _____ To _____ Ft.	_____	_____	_____

If additional space is needed use back of form.

LOCATION SKETCH

(Show direction and distance from at least two State Roads, or other map reference points)

See Monitoring Well Location Map

11. GROUT:

Depth	Material	Method
From <u>0</u> To <u>3</u> Ft.	<u>Neat Cement</u>	<u>Tremie</u>
From _____ To _____ Ft.	_____	_____

12. SCREEN:

Depth	Diameter	Slot Size	Material
From <u>5</u> To <u>20</u> Ft.	<u>4</u> in.	<u>0.010</u> in.	<u>PVC</u>
From _____ To _____ Ft.	_____ in.	_____ in.	_____
From _____ To _____ Ft.	_____ in.	_____ in.	_____

13. GRAVEL PACK:

Depth	Size	Material
From <u>4</u> To <u>20</u> Ft.	_____	<u>Sand</u>
From _____ To _____ Ft.	_____	_____

14. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CONTRACTOR OR AGENT

2/23/93

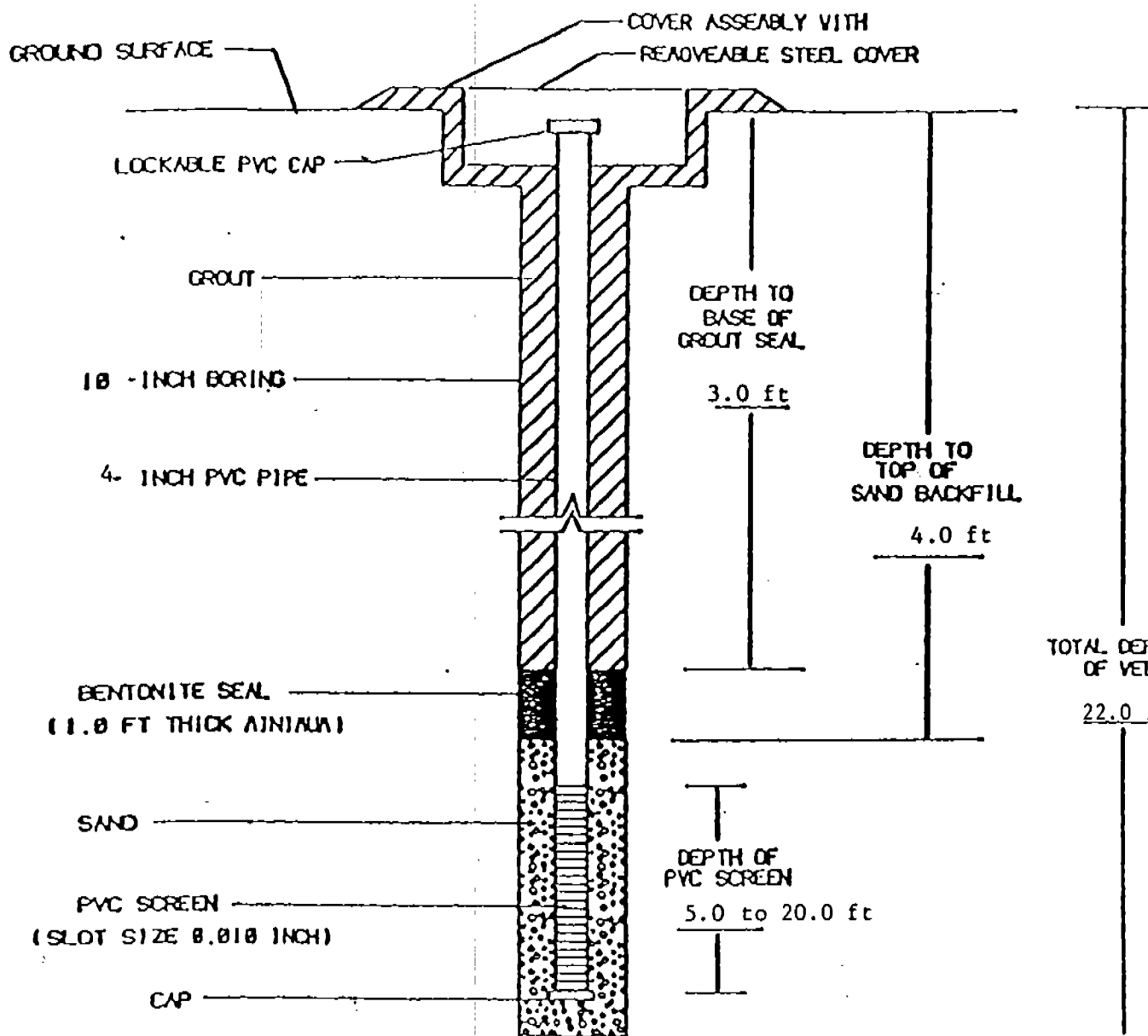
DATE

RW-1 Revised 11/84

Submit original to Division of Environmental Management and copy to well owner.

GROUND-WATER MONITORING WELL INSTALLATION RECORD

JOB NAME Summit Ave Sunoco JOB NUMBER 259-90007-01
 WELL NUMBER MW-1 GROUND SURFACE ELEVATION _____
 LOCATION Greensboro, North Carolina
 INSTALLATION DATE December 3, 1992



NOTE: ALL PVC PIPE JOINTS
HAVE SCREW CONNECTORS

FOR OFFICE USE ONLY

Quad No. _____ Serial No. _____
Lat. _____ Long. _____ Pc _____
Minor Basin _____
Basin Code _____
Header Ent. _____ GW-1 Ent. _____

WELL CONSTRUCTION RECORD

DRILLING CONTRACTOR Law Engineering
DRILLER REGISTRATION NUMBER 332

STATE WELL CONSTRUCTION PERMIT NUMBER: 40-1070-WN-0495

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town Greensboro, NC

(Road, Community, or Subdivision and Lot No.)

2. OWNER Sunoco/Mid-State Oil Company
ADDRESS 1835 Market St., 11 Penn Ctr., 9th Floor
Philadelphia PA 19103
(Street or Route No.)
City or Town State Zip Code

3. DATE DRILLED 12/3/92 USE OF WELL Monitoring

4. TOTAL DEPTH 25 ft CUTTINGS COLLECTED ☒ Yes ☐ No

5. DOES WELL REPLACE EXISTING WELL? ☐ Yes ☒ No

6. STATIC WATER LEVEL: _____ FT. ☐ above TOP OF CASING,
☒ below
TOP OF CASING IS _____ FT. ABOVE LAND SURFACE

7. YIELD (gpm): N.A. METHOD OF TEST N.A.

8. WATER ZONES (depth): _____

9. CHLORINATION: Type N.A. Amount N.A.

10. CASING:

From	To	Depth	Diameter	Wall Thickness or Weight/FT.	Material
From <u>0</u>	To <u>5</u>	Fl. <u>4-in</u>	<u>Sch 40</u>	<u>PVC</u>	
From _____	To _____	Fl. _____	_____	_____	_____
From _____	To _____	Fl. _____	_____	_____	_____

11. GROUT:

From	To	Depth	Material	Method
From <u>0</u>	To <u>3</u>	Fl. <u>Neat Cement</u>	<u>Tremie</u>	
From _____	To _____	Fl. _____	_____	_____

12. SCREEN:

From	To	Depth	Diameter	Slot Size	Material
From <u>5</u>	To <u>20</u>	Fl. <u>4 in</u>	<u>0.010 in</u>	<u>PVC</u>	
From _____	To _____	Fl. _____	_____	_____	_____
From _____	To _____	Fl. _____	_____	_____	_____

13. GRAVEL PACK:

From	To	Depth	Size	Material
From <u>4</u>	To <u>20</u>	Fl. _____	<u>Sand</u>	
From _____	To _____	Fl. _____	_____	_____

14. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER

SIGNATURE OF CONTRACTOR OR AGENT

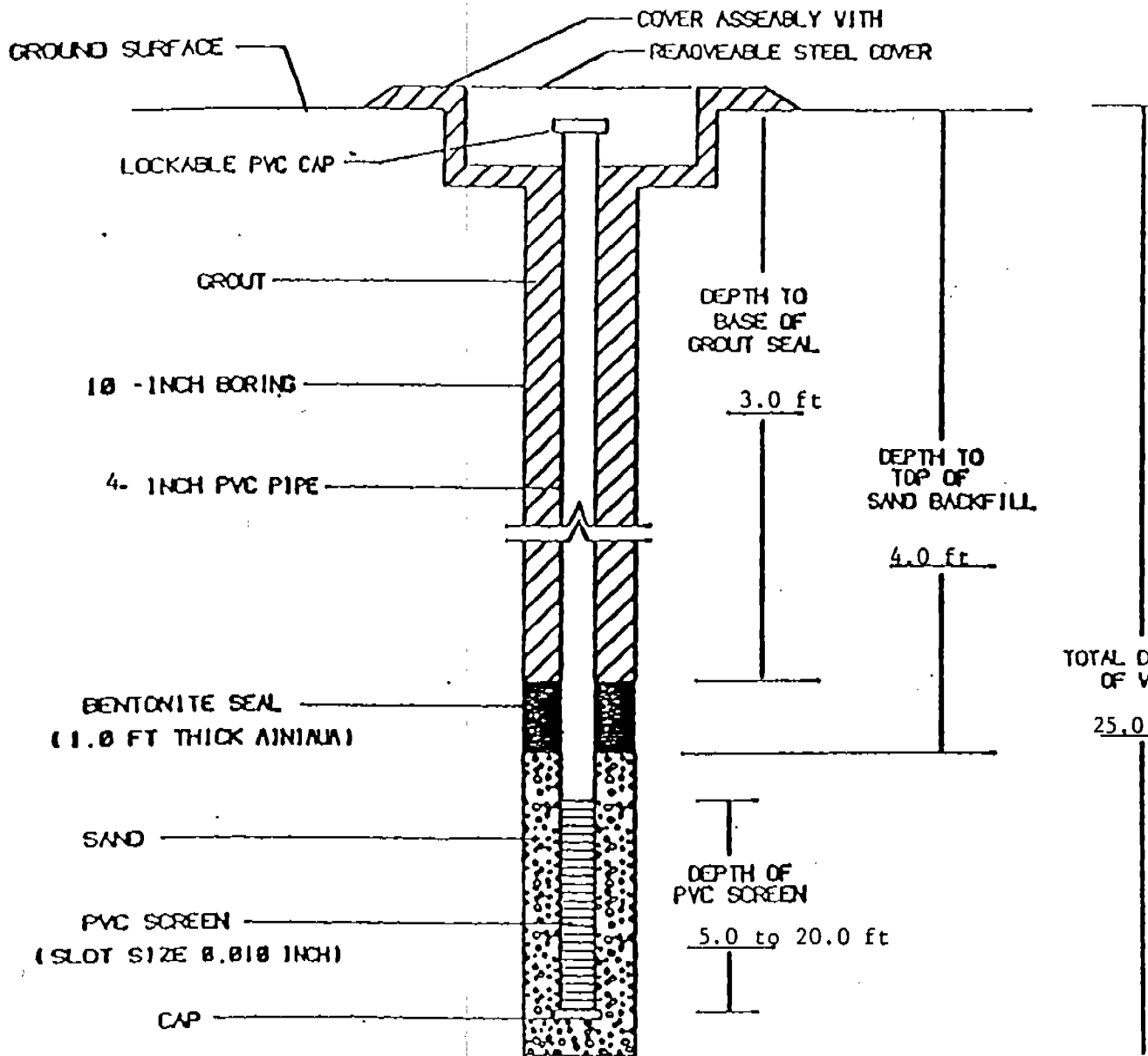
2/23/93

DATE

Submit original to Division of Environmental Management and copy to well owner.

GROUND-WATER MONITORING WELL INSTALLATION RECORD

JOB NAME Summit Ave Sunoco JOB NUMBER 259-90007-01
 WELL NUMBER ML-2 GROUND SURFACE ELEVATION _____
 LOCATION Greensboro, North Carolina
 INSTALLATION DATE December 3, 1992



NOTE: ALL PVC PIPE JOINTS
HAVE SCREW CONNECTORS

FOR OFFICE USE ONLY

Quadr. No. _____ Serial No. _____
Lat. _____ Long. _____ Po. _____
Minor Basin _____
Basin Code _____
Header Ent. _____ GW-1 Ent. _____

WELL CONSTRUCTION RECORD

DRILLING CONTRACTOR Law Engineering
DRILLER REGISTRATION NUMBER 332

STATE WELL CONSTRUCTION PERMIT NUMBER: 40-1070-WM-0495

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: Greensboro, NC

(Road, Community, or Subdivision and Lot No.)

2. OWNER Sunoco/Mid-State Oil Company
ADDRESS 1835 Market St., 11 Penn Ctr., 9th Floor
Philadelphia PA 19103
City or Town State Zip Code

3. DATE DRILLED 12/3/92 USE OF WELL Monitoring

4. TOTAL DEPTH 20 ft CUTTINGS COLLECTED ☒ Yes ☐ No

5. DOES WELL REPLACE EXISTING WELL? ☐ Yes ☒ No

6. STATIC WATER LEVEL: _____ FT. ☐ above TOP OF CASING,
☐ below TOP OF CASING IS _____ FT. ABOVE LAND SURFACE

7. YIELD (gpm): N.A. METHOD OF TEST N.A.

8. WATER ZONES (depth): _____

9. CHLORINATION: Type N.A. Amount N.A.

10. CASING:

Depth	Diameter	Wall Thickness or Weight/FL	Material
From <u>0</u> To <u>5</u> Ft.	<u>4-in</u>	<u>Sch 40</u>	<u>PVC</u>
From _____ To _____ Ft.	_____	_____	_____
From _____ To _____ Ft.	_____	_____	_____

11. GROUT:

Depth	Material	Method
From <u>0</u> To <u>3</u> Ft.	<u>Neat Cement</u>	<u>Tremie</u>
From _____ To _____ Ft.	_____	_____

12. SCREEN:

Depth	Diameter	Slot Size	Material
From <u>5</u> To <u>20</u> Ft.	<u>4</u> in.	<u>0.010</u> in.	<u>PVC</u>
From _____ To _____ Ft.	_____ in.	_____ in.	_____
From _____ To _____ Ft.	_____ in.	_____ in.	_____

13. GRAVEL PACK:

Depth	Size	Material
From <u>4</u> To <u>20</u> Ft.	_____	<u>Sand</u>
From _____ To _____ Ft.	_____	_____

14. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER

SIGNATURE OF CONTRACTOR OR AGENT

2/23/93

DATE

GW-1 Revised 11/94

Submit original to Division of Environmental Management and copy to well owner.

County: Guilford

Depth From _____ To _____
DRILLING LOG
Formation Description

See Soil Test Boring Log
MW-3

If additional space is needed use back of form.

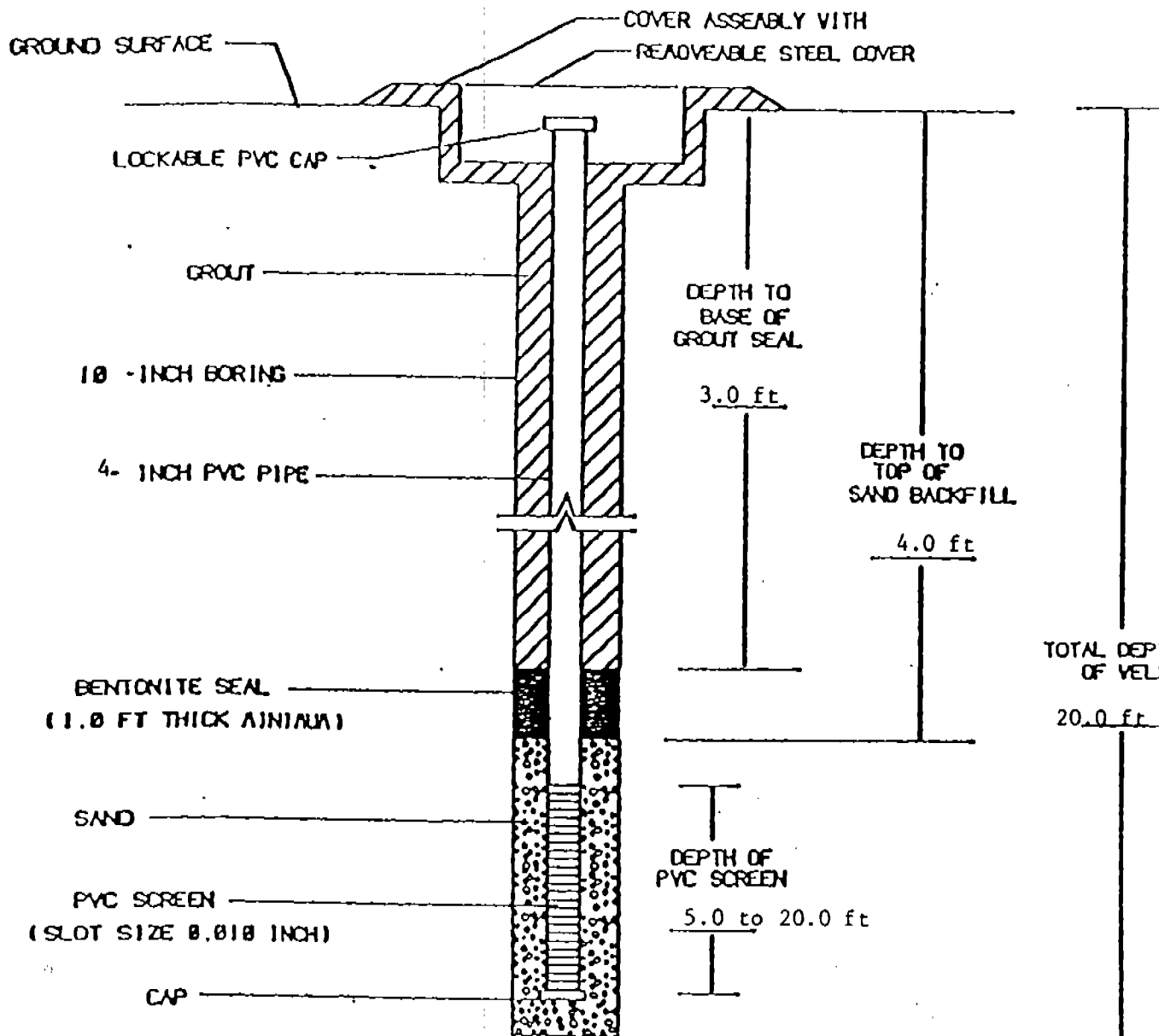
LOCATION SKETCH

(Show direction and distance from at least two State Roads, or other map reference points)

See Monitoring Well Location Map

GROUND-WATER MONITORING WELL INSTALLATION RECORD

JOB NAME Summit Ave Sunoco JOB NUMBER 259-90007-01
 WELL NUMBER MW-3 GROUND SURFACE ELEVATION _____
 LOCATION Greensboro, North Carolina
 INSTALLATION DATE December 3, 1992



NOTE: ALL PVC PIPE JOINTS
 HAVE SCREW CONNECTORS

FOR OFFICE USE ONLY

Qued. No. _____ Serial No. _____
Lat. _____ Long. _____ Po. _____
Minor Basin _____
Basin Code _____
Header Ent. _____ GW-1 Ent. _____

WELL CONSTRUCTION RECORD

DRILLING CONTRACTOR Law Engineering
DRILLER REGISTRATION NUMBER 332

STATE WELL CONSTRUCTION PERMIT NUMBER: 40-1070-WM-0495

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town Greensboro, NC

Road, Community, or Subdivision and Lot No.)

2. OWNER Sunoco/Mid-State Oil Company

ADDRESS 1835 Market St. 11 Penn Ctr. 9th Floor
(Street or Route No.)
Philadelphia PA 19103
City or Town State Zip Code

3. DATE DRILLED 12/3/92 USE OF WELL Monitoring

4. TOTAL DEPTH 21 ft CUTTINGS COLLECTED ☒ Yes ☐ No

5. DOES WELL REPLACE EXISTING WELL? ☐ Yes ☒ No

6. STATIC WATER LEVEL: _____ FT. ☐ above TOP OF CASING.
☒ below
TOP OF CASING IS _____ FT. ABOVE LAND SURFACE

7. YIELD (gpm): N.A. METHOD OF TEST N.A.

8. WATER ZONES (depth): _____

9. CHLORINATION: Type N.A. Amount N.A.

10. CASING:

Depth	Diameter	Wall Thickness or Weight/Ft.	Material
From <u>0</u> To <u>5</u> Ft.	<u>4-in</u>	<u>Sch 40</u>	<u>PVC</u>
From _____ To _____ Ft.	_____	_____	_____
From _____ To _____ Ft.	_____	_____	_____

11. GROUT:

Depth	Material	Method
From <u>0</u> To <u>3</u> Ft.	<u>Neat Cement</u>	<u>Tremie</u>
From _____ To _____ Ft.	_____	_____

12. SCREEN:

Depth	Diameter	Slot Size	Material
From <u>5</u> To <u>20</u> Ft.	<u>4</u> in	<u>0.010</u> in	<u>PVC</u>
From _____ To _____ Ft.	_____ in	_____ in	_____
From _____ To _____ Ft.	_____ in	_____ in	_____

13. GRAVEL PACK:

Depth	Size	Material
From <u>4</u> To <u>20</u> Ft.	_____	<u>Sand</u>
From _____ To _____ Ft.	_____	_____

14. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15-NCAC.2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

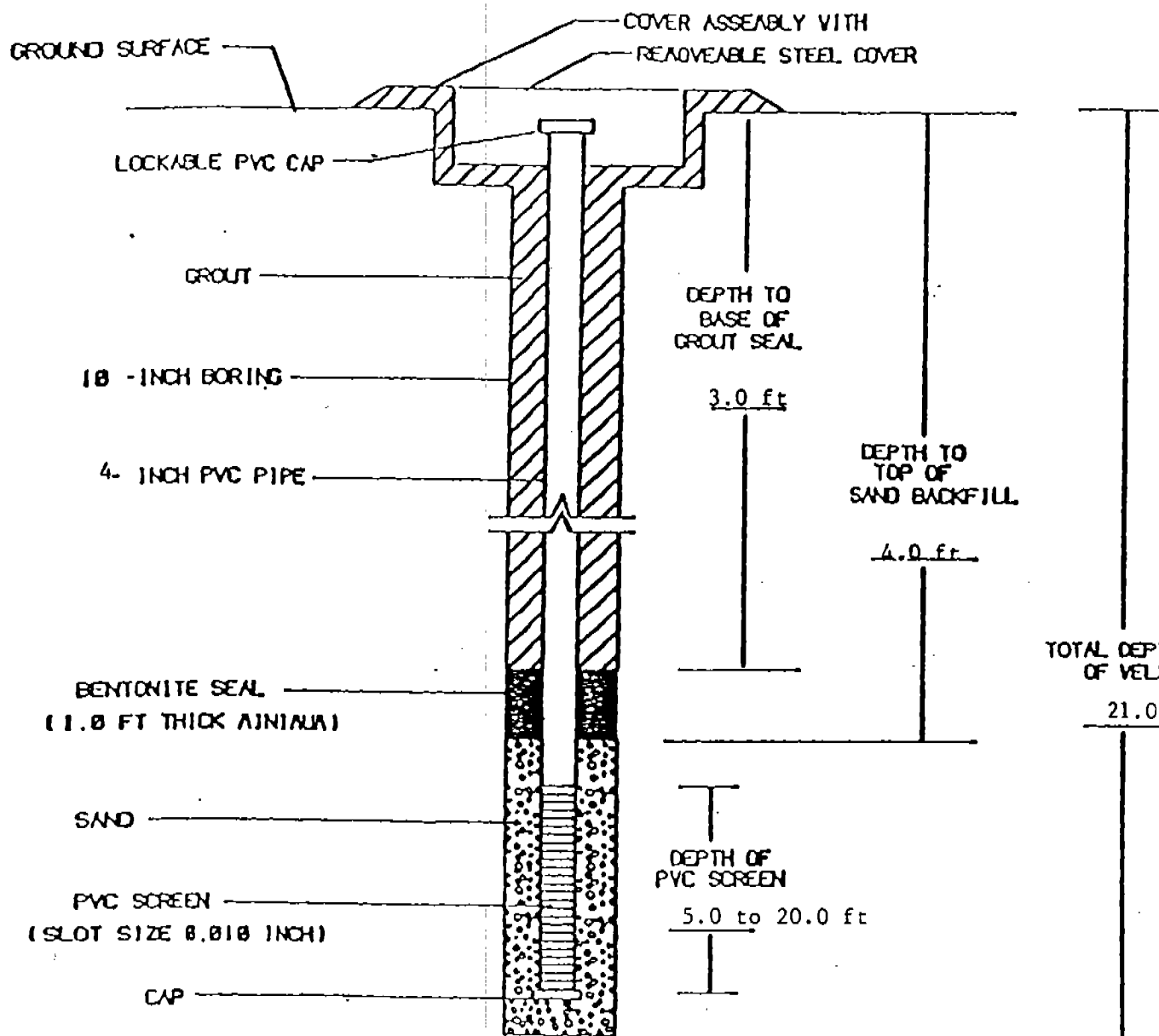
SIGNATURE OF CONTRACTOR OR AGENT

DATE

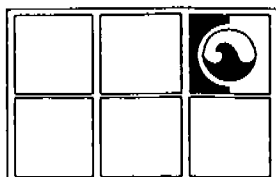
Submit original to Division of Environmental Management and copy to well owner.

GROUND-WATER MONITORING WELL INSTALLATION RECORD

JOB NAME Summit Ave Sunoco JOB NUMBER 259-90007-01
 WELL NUMBER MW-4 GROUND SURFACE ELEVATION _____
 LOCATION Greensboro, North Carolina
 INSTALLATION DATE December 3, 1992



NOTE: ALL PVC PIPE JOINTS
 HAVE SCREW CONNECTORS



GROUNDWATER TECHNOLOGY INC.

CLIENT: SUN COMPANY, INC.
 PROJECT NAME: SUN -- SUMMIT AVE.
 PROJECT NUMBER: 053245445
 LOCATION: SUMMIT AVE.
GREENSBORO, NC
 DRILLER: FISHBURNE DRILLING, INC.

DATE 01/10/93 WELL NUMBER VMW-6

CASED FROM 0 TO 30' WITH SCH 40 PVC
 SCREENED FROM 30' TO 35' WITH 0.020" SLOT
 WELL DEPTH 35' WELL DIAMETER 2"
 ELEVATION 598.21'

DRILL RIG CME 75
 DRILL METHOD HOLLOW STEM AUGER
 DATE(S) DRILLED MAY 27, 1993
 LOGGED BY T. WATSON

ANNULUS COMPLETION SANDPACK 35'-28'; BENTONITE 28'-26'; GROUT 26'-0
 OTHER 6" OUTER CASING SET AT 28'; COMPLETED W/LOCKING CAP & CONC. EMBEDDED MH COV.

WELL DETAIL	DEPTH	GRAPHIC COLUMN	LITHOLOGICAL DESCRIPTION	SAMPLE	COMMENTS
			ASPHALT/CRUSHER RUN: To 6"		
			SILT/SILTY CLAY: Brn, little F to M-grnd.	0-2'	BC=8-6-7-6 PID=136
			slight hydrocarbon (HC) odor		
			SILT: Orange-gry, mottled, some clay & F	2-4'	BC=6-8-15-16 PID=56.2
			M-grained sand, dry-damp, slight HC odor		
			Silt: As above, damp-dry	4-6'	BC=3-5-5-6 PID=70.1
			SILT: Orange-lt. gry, some F to M-grained	6-8'	BC=6-6-8-9 PID=322
			sand, clayey, moist (Lab Sample)		
			SILT: As above, clayey & sandy, moist-wet	8-10'	BC=3-3-4-6 PID=117
			SILT: Orange, some clay, tr. F-grnd.	10-12'	BC=6-6-8-7 PID=50.4
			sand, saturated, thin layer of gravel,		
			soft		
			SILT: Orange-red-tan, mottled, some-	14-16'	BC=2-2-1-2 PID=34.3
			little clay, tr. F-grnd. sand, saturated,		
			black organic staining (vein), soft		
			SILT: As above, black organic staining,	19-21'	BC=1-1-3-2 PID=22.7
			saturated, soft		
			SILT: Or, little CL, tr. F-grnd. sand,	24-26'	BC=3-2-2-3 PID=14.3
			litte blk org. staining, sl. foliated,		
			thin layer of SAPROLITE @ 25', saturated,		
			soft		
			SILT: As above to 29' then SAPROLITE:	28-30'	BC=27-40-21-50/5 PID=13.2
			Wht-lt. gry, SILT - very F-grnd. sand, v.		
			F mica, appears to be weathered granite,		
			(not foliated)		

Quad. No. _____ Serial No. _____
Lat. _____ Long. _____ Pc _____
Minor Basin _____
Basin Code _____
Header Ent. _____ GW-1-Ent. _____

MW-6

DRILLER REGISTRATION NUMBER 951

STATE WELL CONSTRUCTION
PERMIT NUMBER: _____

- Country: GUILFORD

Depth		Direction	Remarks
From	To		
10	15		
15	20		
20	25		
25	30		
30	35		
35	40		
40	45		
45	50		
50	55		
55	60		
60	65		
65	70		
70	75		
75	80		
80	85		
85	90		
90	95		
95	100		

DRILLING LOG

Formation Description

10. CASING:

If additional space is needed use back of form.

LOCATION SKETCH

(Show direction and distance from at least two State Roads,
or other map reference points)

12. SCREEN:

13. GRAVEL PACK:

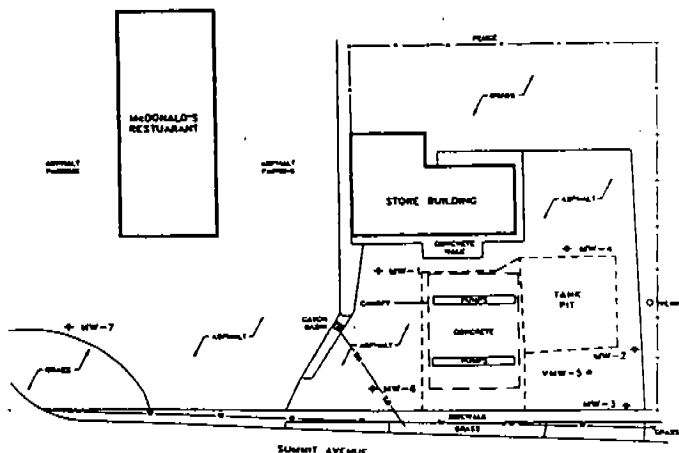
Depth	Size	Material
From 2' To 23'	Fl. # 2	Washed Sand
From _____ To _____	Fl. _____	_____

14. REMARKS: _____

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTION STANDARDS. AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CONTRACTOR OR AGENT

DATE _____





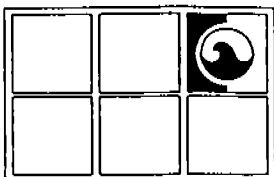
DRILLER: FISHBURNE DRILLING, INC.

WELL NUMBER MW-6

LOGGED BY T. WATSON

OTHER WELL COMPLETED WITH LOCKING CAP & CONCRETE EMBEDDED MANHOLE COVER

[illegible]



GROUNDWATER TECHNOLOGY INC.

CLIENT: SUN COMPANY, INC.

PROJECT NAME: SUN - SUMMIT AVE.

PROJECT NUMBER: 053245445

LOCATION: SUMMIT AVE.

GREENSBORO, NC

DATE 01/10/93

WELL NUMBER MW-7

DRILLER: FISHBURNE DRILLING, INC.

CASED FROM 0 TO 5' WITH SCH 40 PVC

DRILL RIG CME 75

SCREENED FROM 5' TO 25' WITH 0.020" SLOT

DRILL METHOD HOLLOW STEM AUGER

WELL DEPTH 25' WELL DIAMETER 2"

DATE(S) DRILLED DECEMBER 9, 1993

ELEVATION 595.14'

LOGGED BY T. WATSON

ANNULUS COMPLETION SANDPACK 25'-3'; BENTONITE 3'-2'; GROUT 2'-0

OTHER WELL COMPLETED WITH LOCKING CAP & CONCRETE EMBEDDED MANHOLE COVER

WELL DETAIL	DEPTH	GRAPHIC COLUMN	LITHOLOGICAL DESCRIPTION	SAMPLE	COMMENTS
			ASPHALT/CRUSHER RUN: To 8"-10"		
			SANDY CLAY: Grey, F-grnd. sand, some silt, plastic, damp	0-3'	(HAND) PID=1.0
			SILTY CLAY: Orange-tan-grey, little F- grnd. sand, damp	3-5'	BC=3-4-5-8 PID=0.8
	5		SILT: Tan-lt. gry, little-trace F-grnd. sand, little clay, damp-moist	5-7'	BC=3-5-11-11 PID=0.7
			SILT: Tan-lt. gry/grn, tr. F-grnd. sand, little clay, damp-moist. (Lab Sample)	7-9'	BC=4-5-7-9 PID=22.5
	10		SILT: As above, moist-wet	9-11'	BC=7-5-7-11 PID=3.9
			SILT: Tan-or-grn/gry, little-some F-grnd. sand, little clay, sl. foliation, wet	13-15'	BC=5-6-8-9 PID=2.8
	15				
			SANDY SILT: Tan-orange-green, trace clay, slight foliation, damp	18-20'	BC=9-11-16-20 PID=4.6
	20				
			SAPROLITE (SANDY SILT): Tan-orange-green- white, F to M-grnd. sand, slightly foliated, damp	23-25'	BC=9-11-14-19 PID=2.8
	25				

VMW-5

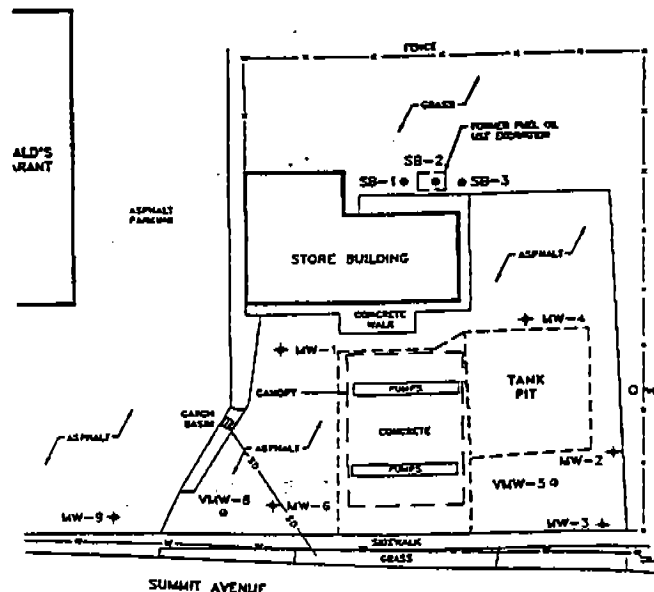
STATE WELL CONSTRUCTION
PERMIT NUMBER: _____ *N/A*

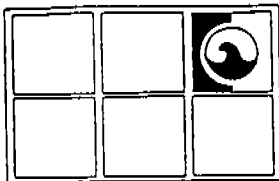
DATE _____

[illegible]

If additional space is needed use back of form.

(Show direction and distance from at least two State Roads,
or other map reference points)





GROUNDWATER TECHNOLOGY INC.

CLIENT: SUN COMPANY, INC.
PROJECT NAME: SUN - SUMMIT - AVE.
PROJECT NUMBER: 003245445
LOCATION: 1103 Summit - Ave
GREENSBORO NC
DRILLER: FISHBANE DRILLING INC.

DATE 8/18/94 WELL NUMBER VMW-8

CASED FROM 0' TO 50' WITH SCH 40 PVC
SCREENED FROM 50' TO 55' WITH 0.020 slot
WELL DEPTH 55' WELL DIAMETER 2"
ELEVATION _____

DRILL RIG CME 75 HD
DRILL METHOD HSA / ROVER PIT
DATE(S) DRILLED 8/17 - 18/94
LOGGED BY T. WATSON

ANNULUS COMPLETION Sandpack: 55' - 47.5' , Bentonite: 47.5' - 45' , Grout: 45' - 0
OTHER 6" outer casing set to 45'

WELL DETAIL	DEPTH	GRAPHIC COLUMN	LITHOLOGICAL DESCRIPTION	SAMPLE	COMMENTS PID
			Asphalt & Gravel run → SANDY		
	5	SANDY CLAY	CLAY: Gray, Damp		
			SANDY CLAY: Brown, Fine - Med Gr.	5-7	2.4
	10	SANDY/CLAYEY SILT	Some Silt, Damp		
			SANDY/CLAYEY SILT: Brown, Fine -	9-11	3.3
	15		Med. Gr. Damp - Moist		
			SANDY/CLAYEY SILT: AA Moist	14-16	3.3
	20		SANDY SILT: Brown, Fine - Med. Gr.	19-21	6.6
			Some Clay, Wet		
	25		SANDY SILT/SILTY SAND: Brown, Fine -	24-26	19.1
			Med. Gr., Little Clay, Wet - Satur.		
	30		SANDY SILT/SILTY SAND: AA, Wet	29-31	12.1
	35		SANDY SILT/SILTY SAND: AA, Wet	34-36	26.6
	40				
	45				
	50	SAPROLITE	SAPROLITE (SANDY SILT)	49-51	
	55				
	60				
	65				

FOR OFFICE USE ONLY

Quad. No. _____ Serial No. _____
Lat. _____ Long. _____ Pc _____
Minor Basin _____
Basin Code _____
Header: Ent _____ GW-1-Ent. _____

WELL CONSTRUCTION RECORD

MW-9

DRILLING CONTRACTOR FISHBURN DRILLING INC.

RILLER REGISTRATION NUMBER 941

STATE WELL CONSTRUCTION

PERMIT NUMBER: 40-1070-WM-0529

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: Greensboro, NC

County: Guilford

(Road, Community, or Subdivision and Lot No.)

OWNER SUN/MID-STATE OIL CO.

ADDRESS 4041 Market St.
(Street or Route No.)

City or Town Astoria, PA State PA Zip Code 19014

City or Town	State	Zip Code
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1. DATE DRILLED 8/19/94 USE OF WELL Monitoring

1. TOTAL DEPTH 24' CUTTINGS COLLECTED ☒ Yes ☐ No

5. DOES WELL REPLACE EXISTING WELL? ☐ Yes ☒ No

6. STATIC WATER LEVEL: _____ FT. ☐ above TOP OF CASING.
☒ below
 TOP OF CASING IS 0 FT. ABOVE LAND SURFACE.

7. YIELD (gpm): _____ METHOD OF TEST _____

8. WATER ZONES (depth): _____

9. CHLORINATION: Type _____ Amount _____

10. CASING: Web Thickness

ING: Depth Diameter Wall Thickness or Weight/FL Material

From 0 To 9' Fl. 2" SCH 40 PVC

From _____ To _____ Ft. _____

From _____ To _____ Fl. _____

11. GROUT: _____ Method _____

Depth Material Method

From 7' To 5' Fl. Bentonite

From 5' To 0 Ft. Neat Cement Grout

12. SCREEN:

Depth Diameter Slot Size Material
From 9' To 24' Ft. 2" In. 0.020 In. BVC

From _____ To _____ FL _____ In _____ In _____

From _____ To _____ FL _____ h _____ h _____

13. GRAVEL PACK:

From 24' To 7' Fl. #2 Washed Sand

From _____ To _____ Fl. _____

14. REMARKS: _____

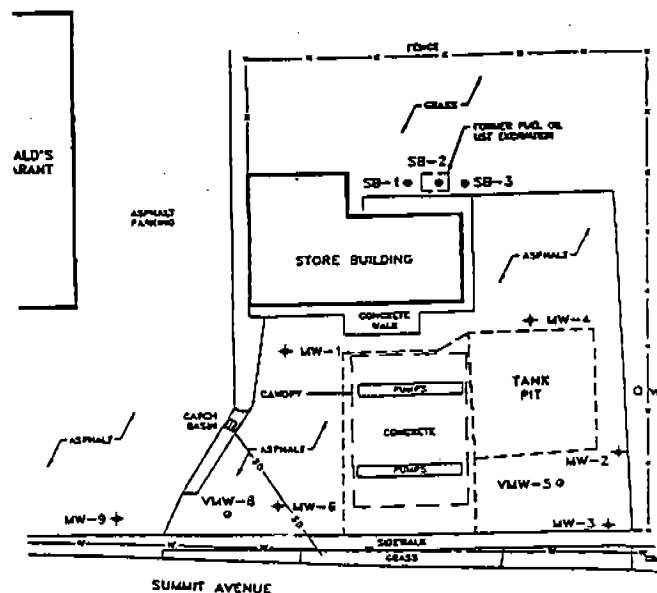
Depth
From _____ To _____

(Please See Attached
Drill Logs)

If additional space is needed use back of form.

LOCATION SKETCH

(Show direction and distance from at least two State Roads,
or other map reference points)

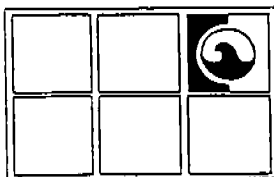


KS: _____

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C. WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF CONTRACTOR OR AGENT

DATE _____



GROUNDWATER TECHNOLOGY INC.

CLIENT: SUN COMPANY, INC.
PROJECT NAME: SUN-SUMMIT AVE.
PROJECT NUMBER: 052245105
LOCATION: 1103 SUMMIT AVE
GREENSBORO, NC
DRILLER: FOUNDATION DRILLING, INC.

DATE 8/18/94 WELL NUMBER MW-9

CASED FROM 0 TO 9' WITH SCN 40 PIC DRILL RIG CMR 75 HD
SCREENED FROM 9' TO 24' WITH 0.020 slot DRILL METHOD HOLLOW STEM AUGERS
WELL DEPTH 24' WELL DIAMETER 2" DATE(S) DRILLED 8/18/94
ELEVATION _____ LOGGED BY T. WATSON
ANNULUS COMPLETION Sandpack: 24'-7', Bentonite: 7'-5', Grout: 5'-0
OTHER _____

WELL DETAIL	DEPTH	GRAPHIC COLUMN	LITHOLOGICAL DESCRIPTION	SAMPLE	Blow Count	COMMENTS PID
		WATER TABLE	Asphalt + Crushed Run			
		SANDY CLAY	SANDY CLAY: Gray - Orange Fine Gr.	2-4	5-9-8-6	41
			Little silt damp			
	5	SILTY SAND	SILTY SAND: Orange - Tan - Lt. Gray Fine	4-6	9-11-16-14	41
			Coarse Gr. Trace Clay Damp - Dry			
			SILTY SAND: Orange - Tan - White, Fine -	6-8	6-8-9-12	1
			Coarse gr. Sm. Gtz. Frag. Dry			
	10	SILT	SILTY SAND: AA Damp - Moist	8-10	9-12-7-10	41
			SILTY SAND: AA Grading to SANDY SILT	10-12	6-6-3-3	2.4
			Fine-Med. Gr. Little - Trace Clay Moist (MWA)			
	15		SILT: Gray - Green - Orange Little - Tr.	12-14	3-4-5-6	2.4
			Clay, Fine Sand, Iron Staining			
			Blk. min. staining, Wet			
		SANDY SILT	SILT: AA, Wet - Saturated	14-16	3-4-6-7	1.6
	20		SANDY SILT: Tan - Orange, Trace Fine	19-21	4-4-3-4	3.3
			Sand thin gravel layer @ 20'			
			Wet - moist, some clay			
			SILT: Orange - White - Green Little	24-26	4-4-5-6	3.3
			Clay, trace fine sand, slight			
	25		Exhaustion Wet			
	30					
	35					



GROUNDWATER
TECHNOLOGY

Drilling Log

Monitoring Well **MW-10**

Project Sun/Summit Ave. Owner Sunoco
Location 1103 Summit Ave., Greensboro, NC Proj. No. 05324-0046
Surface Elev. _____ Total Hole Depth 20 ft. Diameter 8 in.
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia 2 in. Length 5 ft. Type/Size 20 SLOT in.
Casing: Dia 2 in. Length 15 ft. Type PVC
Fill Material SAND Rig/Core CME 75
Drill Co. Rock-Ray Drilling Method HOLLOW STEM AUGER
Driller R. Schmon Log By J. KIRKPATRICK Date 8/18/95 Permit # _____
Checked By _____ License No. _____

See Site Map
For Boring Location

COMMENTS:

Depth (ft.)	Well Completion	FID (ppm)	Sample ID Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						
0						(0-.25') Asphalt
2						(.25-4') Light tan silty clayey fine SAND; dry; no odor.
4						(4-6') Same as above.
6		74	11/75%			(6-8') Light tan silty clayey fine to coarse SAND; moist to wet; no odor.
8		160	10/75%			(8-10') Same as above.
10		95	4/100%		ML	(10-12') Same as above.
12		7.5	4/100%			(12-14') Brown-orange mottled coarse sandy clayey SILT; wet; no odor; Saprolite.
14		0.0	6/100%			(16-17') Same as above.
16		0.4	6/100%			(17-18') Light brown SILT; wet.
18		2.8	5/100%			(18-20') Same as above.
20		38	16/100%			
22						
24						
26						
28						
30						